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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,317	10/14/2003	Feng Gao	10030757-1	5036
75	90 12/14/2006	EXAMINER		
AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P.O. Box 7599 Loveland, CO 80537-0599			NGO, CHUONG D	
			ART UNIT	PAPER NUMBER
			2193	
			DATE MAILED: 12/14/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    Examiner			Application No.	Applicant(s)			
Chuong D. Ngo  — The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  If NO period for reby is specified above, the maximum statistical years of the cover sky (8) MONTHS from the mining date of this communication.  If NO period for reby is specified above, the maximum statistical years of the communication of the cover sky (8) MONTHS from the mailing date of the communication.  If NO period for reby is specified above, the maximum statistical years of the communication of the communication.  If NO period for reby is specified above, the maximum statistical years of the communication of the communication of the communication.  If NO period for reby is specified above, the maximum statistical years of the communication of the communication.  If NO period for reby is specified above, the maximum statistical years of the communication.  If NO period for reby is specified above, the maximum statistical years of the communication.  If NO period for reby is specified above, the maximum statistical years of the communication.  If NO period for reby is specified above, the maximum statistical years of the scale of the communication.  If NO period for reby is specified above, the maximum statistical years of the communication.  If NO period for reby is specified above, the maximum statistical years of the maximum statistical years of the communication.  If NO period for reby is specified above, the maximum statistical years of the period years	Office Action Summary		10/685,317	GAO ET AL.			
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Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION, after 51% (6) MONTHS from the mailing date of this communication, 1.136,6). In or event, however, may a reply te limitery find after 51% (6) MONTHS from the mailing date of this communication. It NO period for reply septicial above, the maximum statutory period will apply and will exergis K(6) MONTHS from the mailing date of this communication. Fallule to reply within the act or extended period for reply will, by statule, cause the application to become ABANDONED (30 U.S.C.§ 133). Indication is produced patent term adjustment. See 37 CFR 1.704(o).  Status  1) ☑ Responsive to communication(s) filed on 14 October 2003. 2a ☑ This action is FINAL. 2b) ☑ This action is non-final. 3) ☑ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s) 1.45 is/are pending in the application. 4) ② Claim(s) 21.45 is/are rejected. 7) ☑ Claim(s) 1.20 is/are rejected. 7) ☑ Claim(s) 1.20 is/are rejected to 2003.  Application Papers  9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 14 October 2006 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Application Papers  9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 14 October 2006 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Application Papers  9) ☐ The specification is objected to by the Examiner. Note the attacked Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received in Application No. ☐ 1. ☐ Certified copies of the priority documents	·		Chuong D. Ngo	2193			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extentions from many be available under the provides of 37 CFR 1-18(s). In no evert, however, may a reply be timely filled.  If NO period for regiv is specified above, the maximum statutory period will apply and will expire SX (e) MONTHS from the maling date of this communication.  Failure for regiv is specified above, the maximum statutory precided will expire SX (e) MONTHS from the maling date of this communication.  Failure for regiv is specified above, the maximum statutory precided will expire SX (e) MONTHS from the maling date of this communication, even if timely filled, may reduce any enter operation that adjustment. Star 57 CFR 1-174(a).  Status  1) Responsive to communication(s) filled on 14 October 2003.  22) This action is FINAL.  2b) This action is non-final.  3) Is since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-45 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 21-45 is/are allowed.  6) Claim(s) 21-45 is/are allowed.  6) Claim(s) 21-45 is/are allowed.  6) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 14 October 2006 is/are: a) Caccepted or b) objected to by the Examiner.  Application Papers  9) The specification is objected to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) Including the correction is required if the drawing(s) is objected to. See 37 CFR 1.85(a).  Replacement drawing sheet(s) Including the correction is required if the drawing(s) is objected to. See 37 CFR 1.85(a).  11) Acknowledgment is made of a claim for foreign prio	Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet v	with the correspondence address			
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	2) Unformation Diagrams Statement(s) (NTO (SD(SS))						

Application/Control Number: 10/685,317

Art Unit: 2193

## DETAILED ACTION

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-20are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-19 are directed to a computer implemented method of calculation in accordance with a mathematical algorithm. Claim 20 merely recite a programmable gate array implementing the method without any defined structure, and thus is no more than an abstract idea. In order for a claimed invention that is directed to such a computation or abstract idea to be statutory, the claimed invention must accomplish a practical application. That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful, concrete and tangible result. State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Also see "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", OG Notices: 22 November 2005. It is clear from claims 1-20 that the claims merely involves calculations and manipulations of data in performing computations. The claimed invention does transform an article or physical object to a different state or thing. The inputs are numbers and the output is also a number. The result of the invention is merely numerical value without a practical application recited in the claims that makes it a real world result. Thus, the result is not useful, concrete and tangible. Therefore, the 1-20 are directed to non-statutory subject matter as the invention as claimed fail accomplish a practical application.

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3. Claims 21-45 are allowed.

4. The prior art made of record and not relied upon is considered pertinent to applicant's

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disclosure.

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The

examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/07/2006

Chuong D Ngo

Primary Examiner

Art Unit 2193